AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) X-radiation imagery device comprising at least one detection matrix made of a semiconducting material comprising pixels ~~(11)~~ to convert incident X-photons into electric charges and an ~~a silicon based~~ electric charges reading panel comprising several electronic devices, each electronic device being integrated by pixel ~~(11)~~, characterized in that each detecting matrix includes a detection layer ~~is~~ made of a continuous layer of semiconducting material deposited in vapour phase on the electric charges reading panel.

2. (Currently Amended) Process for making an X-radiation imagery device comprising at least one detecting matrix made of a semiconducting material comprising pixels ~~(11)~~, to convert incident X-photons into electric charges, and an electric charges reading panel ~~(10)~~ based on silicon comprising several electronic devices, each electronic device being integrated by pixel ~~(11)~~, characterized in that each detecting matrix is obtained by vapour phase deposition of a semiconductor ~~(13)~~ on the electric charges reading panel, each detecting matrix including a detection layer made of a continuous layer of semiconducting material.

3. (Currently Amended) Process according to claim 2, in which the evaporation properties of this semiconductor are such that the deposition can be done at a temperature lower than a temperature ~~such~~ that damages the electronic devices ~~are not damaged~~.

4. (Original) Process according to claim 2, in which the semiconducting material used to make the matrix of detection pixels is CdTe, HgI_2 or PbI_2.

5. (Currently Amended) Process according to claim 2, in which electronic devices made using a process technology having a feature device size of 1.25 μm ~~technological system~~ are used.

6. (Currently Amended) Process according to claim 2, in which electronic devices made using a process technology having a feature device size of 0.1 μm ~~technological system~~ are used.

7. (New) X-radiation imagery device according to claim 1, further characterized in that the detection layer is deposited directly on the electronic devices of the electric charges reading panel in each pixel.

8. (New) X-radiation imagery device according to claim 1, further characterized in that the semiconducting material of the detection layer is crystalline silicon.